

In the Matter of: ) Docket No. 11-IEP-1D RELIABILITY  
) COMMENT ON DRAFT NEED ASSESSMENTS  
Preparation of the )  
2011 Integrated Energy Policy Report )

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### Comments of the California Public Utilities Commission's Energy Division on the Renewable Net Short Estimate Methodologies for the 2011 IEPR Report

By these comments, California Public Utilities Commission Energy Division (Energy Division) replies to comments about quantification of energy savings from utility programs made by Southern California Edison (SCE) following the March 8, 2011 workshop conducted by the Energy Commission on renewable net short estimate methodologies. Specifically the section starting on page 2 regarding energy efficiency. We strongly support the use of evaluated energy efficiency savings results in procurement planning and forecasting efforts when the information is available. Evaluation-based estimates provide a more accurate reflection of the savings that were achieved for the time period and the likely impacts of the installed technologies over their lifetime, rather than planning assumptions.

CPUC staff has provided the Energy Commission with evaluation-based results for the 2006-2008 program cycle as well as evaluation-based savings estimates for the 2009 program cycle. Energy Division believes these to be the best estimates of savings available on the grid for that time period and the likely future impact of these technologies over their lifetime.

CPUC staff conducted comprehensive field based evaluation of the portfolio activities in the 2006-2008 time frame and the results of these studies were found to be statistically robust.<sup>1</sup>

**Table 19. Evaluated Savings, 90% Relative Precision and Confidence Intervals, by IOU**

		Total Portfolio Net Savings	90% Relative Precision	Upper Bound	Lower Bound
PG&E	GWh	1,766	±4.51%	1,846	1,686
	MW	320	±3.21%	330	310
	Therms	22	±13.47%	25	19
SCE	GWh	1,963	±5.88%	2,078	1,848
	MW	384	±3.00%	396	372
SoCal Gas	Therms	32	±14.63%	37	27
SDG&E	GWh	364	±7.67%	392	336
	MW	72	±6.10%	76	68
	Therms	3	±5.91%	3	3

<sup>1</sup> California Public Utilities Commission, "2006-2008 Energy Efficiency Evaluation Report", July 2009; page 89.

The uncertainties that surround the savings estimates in this table reflect the variation in sampling precision. Other uncertainties are also present in the assumptions used to estimate savings; however, the assumptions are less uncertain after field-based evaluation activities than assumptions that are used in planning estimates that do not consider what has transpired in the field.

In the 2006-2008 program period, for example, field-based evaluation revealed that planning assumptions were not accurately reflecting estimates for the hours of use for standard CFL installations. The studies revealed that programmatic focus on specialty bulbs and smaller retail outlets may increase opportunities for net savings. Another significant difference from the planning assumptions was in the program savings attributable to large commercial and industrial energy efficiency activities. While these projects have significant potential, many projects were deemed likely to have occurred in the absence of the program. Improvements in the utilities' approach to advanced screening of these projects may allow programs to achieve more savings.

It is also important to note that the savings estimates available for this time period were defined by the policy definitions that were in place at the time, which may result in more or less conservative estimates of savings than were actually available on the grid. Consequently, for the 2006-2008 program period and 2009 bridge year, only savings directly attributable to the programs are reflected in our results. To allow for greater flexibility in the forecasting process (i.e. include program attribution or not), the data sets for 2006-2008 and for 2009 include savings estimates that include (net savings) and exclude (gross savings) factors of program attribution. Energy Division supports the use of evaluated gross savings for purposes of procurement planning and forecasting.

Parties continue to contend that since D.10-12-049<sup>2</sup> did not use evaluated results in determining the Risk/Reward Incentive payment that the Commission does not acknowledge the use of the evaluated results for planning where they are available. The scope of D.10-12-049 December 16, 2010: Decision Regarding the Risk/Reward Incentive Mechanism Earnings True-up for 2006-2008 was limited to deciding a payment to the IOUs for that time period, and the Commission clearly acknowledged the value and intent of using updated information based on field-based evaluation for planning purposes.

The outcome of D.10-12-049 was based on the inability for the utilities to adapt to changing assumptions as the programs are being implemented:

*"Irrespective of the accuracy of the updates adopted by Energy Division, we find that the incentive mechanism as implemented was/is unfair to the utilities, in that it bases its results on assumptions the utilities cannot be reasonably expected to anticipate; and further, when those changed assumptions come to light, cannot be reasonably expected to respond to in a way that enables them to substantially avoid the adverse impacts on the estimated performance of their programs." pg 41*

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<sup>2</sup>[http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/128879.pdf](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/128879.pdf)

D.10-12-049 also clearly acknowledged the value of using updated information and assumptions based on field research for long term procurement planning and supply side resources:

*"For purposes of determining the actual impacts of energy efficiency programs in reducing demand and obviating the need for supply side resources, it is clearly incumbent on the Commission to update the assumptions used to quantify the impacts of the utilities' efforts. Because the actual impacts of energy efficiency play a key role in determinations of supply side resource need, it would be inappropriate to assess savings achieved from energy efficiency based on outdated assumptions in this context."*pg33

SCE contends that they have consistently met or exceeded energy efficiency goals in the past, and that therefore using evaluated results is not appropriate. In SCE's March 18, 2011, comments regarding California Energy Commission ("Energy Commission") Docket No. 11-IEP-1D Reliability: Staff Workshop on the Proposed Method to Calculate the Amount of New Renewable Generation Required to Meet Policy Targets,<sup>3</sup> they note that they have consistently exceeded their goals. While this statement is true when judging against SCE's planning assumption (ex-ante) values, it is not true when compared with field-based evaluation results. Since 2002-2003, the results of field-based evaluation (ex-post) of program accomplishments have not typically exceeded the goals.

Table 3. Reported and Evaluated Net Savings as a Percentage of Savings Goals since 2002\*

Program Cycle	kWh		kW		Therms	
	Reported	Evaluated	Reported	Evaluated	Reported	Evaluated
2002-2003	118%	104%	104%	86%	98%	81%
2004-2005	127%	79%	133%	75%	182%	55%
2006-2008	151%	62%	122%	55%	117%	50%

\*In this table the 2002-2003 and the 2004-2005 accomplishments are compared to IOU program specific goals; and in 2006-2008 the CPUC adopted goal is the point of comparison.

Evaluated savings results provide the necessary insight to know what savings were realized in the field as opposed to relying on estimates of savings derived prior to program implementation. Evaluated savings better reflect actual savings available on the grid based on what, when, and where the technologies were installed for that time period. Energy Division does not endorse the application of these estimates to any vintage of portfolio savings. Estimates derived in 2006-2008 may not be applicable to prior or future program periods due to differences in the programs available, differences in market conditions, and differences in the technologies offered. However, Energy Division does endorse the concept of using the best knowledge from evaluation studies to

<sup>3</sup> [https://archivedmz.cpuc.ca.gov/cgi-mod/getstubbedattachment.cgi/SCE\\_Comments\\_net%20short\\_03-18-2011TN-600443.pdf?charset=iso-8859-1&delivery=1300895288&len=156748&md5=7a946948e28c2c53694cbf355240fc7d&mid=ad8d4b0d558cc6d4aa1f6c1e7bd8ac0314c47d87ad8fcee87571d916f057ab228f186020](https://archivedmz.cpuc.ca.gov/cgi-mod/getstubbedattachment.cgi/SCE_Comments_net%20short_03-18-2011TN-600443.pdf?charset=iso-8859-1&delivery=1300895288&len=156748&md5=7a946948e28c2c53694cbf355240fc7d&mid=ad8d4b0d558cc6d4aa1f6c1e7bd8ac0314c47d87ad8fcee87571d916f057ab228f186020)

adjust planning (ex ante) energy efficiency savings estimates for use in forecasting and procurement activities.

Energy Division believes that the “uncertainties” associated with the evaluation results have been adequately addressed through the process established by the Commission for that time period. CPUC staff reviewed over 1,700 comments on the draft and final evaluation reports, made corrections to errors, and clarified methods and approaches in finalizing the reports. The CPUC has not adopted any additional process to review “remaining” uncertainties for this historic period.

The CPUC needs complete and accurate forecast information on which to continue our efforts to ensure a reliable and cost-effective electricity supply.<sup>4</sup> In support of this need, Energy Division recommends using the results of our evaluations, which were based on a set of rigorous analytical methodologies that have evolved across twenty years of energy efficiency evaluation in the state.

Dated May 12, 2011

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Julie A. Fitch', with a long horizontal stroke extending to the right.

Julie A. Fitch  
Director, Energy Division  
California Public Utilities Commission  
505 Van Ness Avenue, 4<sup>th</sup> Floor  
San Francisco, CA 94102-3298

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<sup>4</sup> R.10-05-006, 2010 LTPP OIR, at 12.